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Signed: Wendy A. Frick**PATENT****IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

Perez, et al.

Examiner: Not yet assigned

Serial No.: 10/052,589

Art Unit: Not yet assigned

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For: **MODEL SYSTEMS FOR
NEUORDEGENERATIVE AND
CARDIOVASCULAR DISORDERS**

Attorney Docket No.: 26473/04200

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**SECOND PRELIMINARY AMENDMENT AND
STATEMENT REGARDING SEQUENCE LISTING**

Dear Sir:

The following is in response to the Office Communication mailed February 25, 2002.

Please amend the above-described application as follows:

IN THE SPECIFICATION

Page 3, line 15:

BRIEF DESCRIPTION OF THE FIGURES

Figure 1 shows the nucleotide sequence, SEQ ID NO. 1, of the cDNA which encodes the hamster wild-type α_{1B} adrenergic receptor and the predicted amino acid sequence, SEQ ID NO. 2, encoded by this nucleotide sequence.

Figure 2 is the DNA sequence, SEQ ID NO. 3, of the murine α_{1B} adrenergic receptor.

wild-type α_{1B} receptor on the cell surface of various organs, and then assaying for changes in α_{1B} receptor function. Such method is useful for identifying compounds which are able to ameliorate the symptoms that result from chronic activation of the α_{1B} adrenergic receptor and assessing the efficacy of the test compound on pathological symptoms that are associated with chronic activation of the α_{1B} adrenergic receptor.

The present invention also relates to methods for treating neurodegenerative disorders in a subject, particularly neurodegenerative disorders evidenced by abnormal locomotor activity or seizures. In one embodiment, the method comprises administering a pharmaceutical composition comprising a biologically effective amount of an α_1 adrenergic receptor antagonist to an animal. As used herein the term " α_1 adrenergic antagonist" refers to compounds that bind selectively to the α_1 adrenergic receptors and block signaling.

BRIEF DESCRIPTION OF THE FIGURES

Figure 1 shows the nucleotide sequence of the cDNA which encodes the hamster wild-type α_{1B} adrenergic receptor and the predicted amino acid sequence encoded by this nucleotide sequence.

Figure 2 is the DNA sequence of the promoter of the murine α_{1B} adrenergic receptor.

Figure 3 is a schematic representation of the method used to prepare a vector comprising a sequence encoding the α_{1B} adrenergic receptor.

Figure 4. (A) A map of the transgene construct showing the size of EcoRI fragments and the binding sites for α_{1B} - and SV40-specific southern probes. Three different transgenes were constructed with the only difference between each being the α_{1B} AR cDNA used (either the wild-type (WT), single mutant or triple mutant cDNA). (B) Southern blot analysis of genomic DNA from nontransgenic (NT)(-/-), heterozygous (+/-) and homozygous (+/+) W2 mice. Tail DNA samples were digested with EcoRI, run on 0.8% agarose gels, transferred to nitrocellulose and probed with either the α_{1B} probe or the SV40 probe. The α_{1B} probe hybridized to 3.0 and 1.6 kb fragments which represented the endogenous α_{1B} AR gene and the transgene respectively. Comparatively, the SV40 probe